

IN THE CLAIMS:

1 ~ 15. (Canceled)

16. (Original) A method for publishing a plurality of objects comprising the steps of:
providing a plurality of objects, including compound objects;
partitioning at least some of the plurality of objects into a plurality of groups such that if two compound objects are constructed from at least one common changed fragment, then the compound objects are placed in a same group; and
publishing all objects belonging to a same group together.

17. (Original) The method as recited in claim 16, wherein the step of publishing includes the step of:
for at least two of the plurality of groups, publishing all objects belonging to a first group before publishing any objects belonging to a second group.

18. (Original) The method as recited in claim 16, wherein the step of publishing includes the step of:
delaying publication of a first object until a second object, which is referenced, by the first object is published.

19. (Original) The method as recited in claim 18, wherein the first and the second objects are Web pages and a reference between the first and the second objects is a hypertext link.

20. (Previously Presented) The method as recited in claim 16, further comprising the steps of:
representing at least some of the plurality of objects by nodes on at least one graph; and
representing one or more relationships between the objects by edges between the nodes.

21. (Previously Presented) The method as recited in claim 20, wherein the at least one graph includes an edge between two nodes representing compound objects if the two compound objects are constructed from at least one common changed fragment.

22. (Previously Presented) The method as recited in claim 20, wherein the edges include a directed edge from a first node representing a first object to a second node representing a second object, if the second object includes a reference to the first object.

23. (Previously Presented) The method of claim 20, further comprising the steps of:
determining if a first compound object and a second compound object embed at least one common changed fragment by:

topologically sorting at least part of the at least one graph;
examining the at least one graph in an order defined by the topological sort; and
when a node n1 is examined, for a node n2 which has changed and for which an edge from node n2 to node n1 exists, constructing a union between a set including node n2 and a set including changed fragments used to construct node n2.

24. (Original) The method as recited in claim 20 further comprising the step of performing a topological sort on at least part of the at least one graph for finding strongly connected components.

25. (Previously Presented) The method as recited in claim 24, further comprising the step of publishing a set of objects belonging to a same strongly connected component, of the at least one graph, together.

26. (Original) The method as recited in claim 24, further comprising the steps of:
examining objects in an order defined by the topological sort;
when an unpublished object is examined, publishing the unpublished object together with all objects belonging to a same strongly connected component.

27 ~ 41. (Canceled)

42. (Original) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for publishing a plurality of objects, the method steps comprising:

providing a plurality of objects, including compound objects;

partitioning at least some of the plurality of objects into a plurality of groups such that if two compound objects are constructed from at least one common changed fragment, then the compound objects are placed in a same group; and

publishing all objects belonging to a same group together.

43. (Original) The program storage device as recited in claim 42, wherein the step of publishing includes the step of:

for at least two of the plurality of groups, publishing all objects belonging to a first group before publishing any objects belonging to a second group.

44. (Original) The program storage device as recited in claim 42, wherein the step of publishing includes the step of:

delaying publication of a first object until a second object which is referenced by the first object is published.

45. (Original) The program storage device as recited in claim 44, wherein the first and the second objects are Web pages and a reference between the first and second objects is a hypertext link.

46. (Previously Presented) The program storage device as recited in claim 42, further comprising the steps of:

representing at least some of the plurality of objects by nodes on at least one graph; and

representing one or more relationships between the objects by edges between the nodes.

47. (Previously Presented) The program storage device as recited in claim 46, wherein the at least one graph includes an edge between two nodes representing compound objects if the two compound objects are constructed from at least one common changed fragment.

48. (Currently Amended) The program storage device as recited in claim 46, wherein the edges include a directed edge from a first node representing a first object to a second node representing a second object, if the second object includes a reference to the first object.

49. (Previously Presented) The program storage device of claim 46, further comprising the steps of:

determining if a first compound object and a second compound object embed at least one common changed fragment by:

topologically sorting the at least one graph;

examining the at least one graph in an order defined by the topological sort; and

when a node n1 is examined, for a node n2 which has changed and for which an edge from node n2 to node n1 exists, constructing a union between a set including node n2 and a set including changed fragments used to construct node n2.

50. (Original) The program storage device as recited in claim 46, further comprising the step of performing a topological sort on at least part of the at least one graph for finding strongly connected components.

51. (Previously Presented) The program storage device as recited in claim 50, further comprising the step of publishing a set of objects belonging to a same strongly connected component, of the at least one graph, together.

52. (Original) The method as recited in claim 50, further comprising the steps of:

examining objects in an order defined by the topological sort;

when an unpublished object is examined, publishing the unpublished object together with all objects belonging to a same strongly connected component.

53. (Previously Presented) A method for publishing a plurality of objects comprising the steps of:

providing a plurality of objects;

constructing at least one graph, the at least one graph including nodes representing at least some of the plurality of objects and edges for connecting nodes having relationships, at least some of the edges being derived from at least one consistency constraint;

finding at least one strongly connected component in the at least one graph; and

publishing a set of objects belonging to a same strongly connected component group.

54. (Canceled)

55. (Original) The method as recited in claim 53, further comprising the step of topologically sorting at least part of the at least one graph.

56. (Original) The method as recited in claim 55, further comprising the steps of:

examining objects in an order defined by topological sorting;

when an unpublished object is examined, publishing the unpublished object together with all objects belonging to a same strongly connected component.

57. (Previously Presented) The method as recited in claim 53, wherein the at least one consistency constraint includes delaying publication of a first object before a second object which is referenced by the first object is published.

58. (Original) The method as recited in claim 57, wherein the first and second objects include Web pages and at least one edge between the objects corresponds to at least one hypertext link.

59. (Original) The method as recited in claim 53, wherein an edge exists from a first object to a second object in at least one of the at least one graphs if the second object has a reference to the first object.

60. (Previously Presented) The method as recited in claim 53, wherein the at least one constancy constraint includes publishing two compound objects together if the two compound objects are both constructed from at least one common changed fragment.

61 ~ 74. (Canceled)

75. (Previously Presented) A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for publishing a plurality of objects, the method steps comprising:

providing a plurality of objects;

constructing at least one graph, the at least one graph including nodes representing at least some of the plurality of objects and edges for connecting nodes having relationships, at least some of the edges being derived from at least one consistency constraint;

finding at least one strongly connected component in the at least one graph; and

publishing a set of objects belonging to a same strongly connected component group.

76. (Previously Presented) The program storage device of claim 75, wherein the methods steps further comprise topologically sorting at least part of the at least one graph.

77. (Previously Presented) The program storage device of claim 76, wherein the method steps further comprise:

examining objects in an order defined by topological sorting; and

when an unpublished object is examined, publishing the unpublished object together with all objects belonging to a same strongly connected component.

78. (Previously Presented) The program storage device of claim 75, wherein the method steps further comprise delaying publication of a first object before a second object which is referenced by the first object is published, based on the at least one consistency constraint.

79. (Previously Presented) The program storage device of claim 78, wherein the first and second objects include Web pages and at least one edge between the objects corresponds to at least one hypertext link.

80. (Previously Presented) The program storage device of claim 75, wherein an edge exists from a first object to a second object in at least one of the at least one graphs if the second object has a reference to the first object.

81. (Previously Presented) The program storage device of claim 75, wherein the method steps further comprise publishing two compound objects together if the two compound objects are both constructed from at least one common changed fragment, based on the at least one consistency constraint.